



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – ADVANCED ZOOLOGY AND BIOTECHNOLOGY

FIFTH SEMESTER – NOVEMBER 2023

UAZ 5504 – IMMUNOLOGY

Date: 10-11-2023

Dept. No.

Max. : 100 Marks

Time: 09:00 AM - 12:00 NOON

SECTION A - K1 (CO1)

Answer ALL the Questions

(10 x 1 = 10)

1. MCQ

- a) The lymphatic system consists of _____.
- A) lymphatic vessels and lymphoid organs
B) all of the plasma component of the bloodstream
C) all fluids inside the body's cells
D) all liquids in the body whether inside cells or in spaces between tissues.
- b) Complement is activated when _____.
- A) The inflammatory response has failed to defend against bacterial invasion
B) antibodies have failed to defend against bacterial invasion
C) microbes enter the body
D) interferon is produced by viruses
- c) IgG antibodies _____.
- A) are responsible for allergic reactions
B) stimulate complement production
C) Bind to pathogens and their toxins
D) Trigger inflammation
- d) The _____ reaction is a series of events occurring whenever the skin is broken due to a minor injury.
- A) allergic B) antibody C) Complement fixation D) inflammatory
- e) Vaccines against viruses are usually
- A) Given at birth B) Expensive C) Either live-attenuated or killed D) Mainly polysaccharide

2. Fill in the blanks

- a) A plasma cell is a mature B cell that mass _____
- b) Immunity is the ability of the body to defend itself against _____
- c) The main antibody type in circulation is _____
- d) _____ are molecules initiating nerve impulses resulting in pain
- e) Successful immunization can be impaired by _____

SECTION A - K2 (CO1)

Answer ALL the Questions

(10 x 1 = 10)

3. True or False

- a) The tonsils and adenoids (pharyngeal tonsils) are composed of partly encapsulated lymph nodules
- b) Complement proteins bind to the surface of microbes already coated with antibodies, and release chemicals that attract phagocytes to the scene
- c) Helper T cells regulate immunity by increasing the response of other immune cells.

d)	A virus-infected cell produces and secretes interferon
e)	Vaccination was invented by Jenner
4.	Answer the following
a)	Comment on NK cells
b)	What is Innate immunity?
c)	Define Antigens.
d)	Comment on Hypersensitivity
e)	What are Live vaccines?
SECTION B - K3 (CO2)	
Answer any TWO of the following (2 x 10 = 20)	
5.	Give short notes on functions of Immune cells.
6.	Differentiate the innate and adaptive immunity.
7.	Describe in detail about Hybridoma technology.
8.	Write an account on Immunotherapy for Tumours.
SECTION C – K4 (CO3)	
Answer any TWO of the following (2 x 10 = 20)	
9.	Explain the structure of Lymphoid organs.
10.	Write an account on CMI.
11.	Enlist the symptoms of Autoimmune disease
12.	Describe in detail about uses of monoclonal antibodies.
SECTION D – K5 (CO4)	
Answer any ONE of the following (1 x 20 = 20)	
13.	Appraise the functions of Lymphoid organs.
14.	Summaries the classes of immunoglobulins.
SECTION E – K6 (CO5)	
Answer any ONE of the following (1 x 20 = 20)	
15.	Report on the types and structure of Major Histocompatibility Complex.
16.	Compile the Immunization Schedule for Children.

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